

**EVALUATION OF THE
NORWEGIAN ACTION PLAN FOR
PESTICIDE RISK REDUCTION (1998-2002)**

**Report from a working group
2003**

SUMMARY

A working group consisted of the same parties involved in the Norwegian Agricultural Agreement (the Farmers Unions and the Government), which has concurrently followed up the *Action Plan for Pesticide Risk Reduction (1998-2002)*, was supplemented by representatives from the Norwegian Consumer Council, the Norwegian Pollution Control Authority, the Norwegian Agricultural Inspection Service, and the Norwegian Food Control Authority. The group has submitted its final evaluations of the Action Plan, and advised actions to be carried forward and incorporated in a new Action Plan for the period 2004-2008.

Based on the pesticide's inherent properties and the calculated risks, as well as sales statistics, a measuring method and indicators have been devised for the purpose of describing the development over time of the health and environmental risks from the use of pesticides. If we compare the average for 1996-97 with that of 2001-02, we can see a slight drop in sales (8%), but a marked reduction in the risk to health (33%) and the environment (37%). Although one should be careful not to place too much weight on these kinds of indication figures, the trend is still clear-cut: a marked reduction in risk transpired during the Action Plan's period, both in terms of health and the environment. New pesticide usage statistics have been prepared by Statistics Norway, which will provide more reliable figures in the long term.

Changes to the pesticide levy system from 1999, with differentiated charges conditional on health and environmental properties, seem to have had the desired effect of users moving away from using hazardous pesticides to less harmful preparations.

As far as the approval scheme for pesticides is concerned, steps have been taken in a number of directions during the Action Plan's time span, underlining the fact that approval evaluations are safer at present than in the past.

Clearer guidelines on pesticide use, a compulsory spraying journal for farmers and more stringent control routines are all actions which will in time lead to progressively safer plant protection.

The mandatory certification scheme for dealers and professional users of pesticides provides a lot of information on biology, pesticides and spraying techniques. This initiative has contributed considerably to reach the targets set out in the Action Plan. The action providing information material on health risks to farmers has also contributed.

In the long term, the introduction of compulsory inspection of spraying equipment will be essential in order to avoid pesticide overdoses and spraying accidents.

Providing that the guidelines on integrated pest management (IPM), which were drawn up during the course of the Action Plan, are implemented on a wide scale, plant protection will become less hazardous and more environmentally sound.

The development of *economic threshold values, prognoses and warning systems* is extremely useful in the work on enhancing the accuracy of the plant protection advice given, and has been instrumental in meeting the overall target in the Action Plan.

The Action Plan has inspired an increase in R&D activity as a link in the long-term accumulation of knowledge. This has led to scientific underpinning of the administration, and has given users new knowledge which has subsequently resulted in their being better equipped to practice effective and less hazardous plant protection management.

Results from surveys undertaken targeting Norwegian farmers supports the impression of risk reduction during the Action Plan's time span, and the results show positive changes in attitude and the practical use and handling of pesticides. Approximately 40% of respondents in a survey from 2002/03 thought that there had been a marked decrease in the use of pesticides on their farms over a five-year period.

The overall evaluation of the impact of the actions contained in the Action Plan has resulted in the evaluation group calculating a risk reduction of at least 25% during the time span of the Action Plan, and therefore confirming that the primary target has been achieved. (*"Risks of health and environment impact caused by the use of pesticides shall be reduced by 25% during the next 5 years"*.)

Even though trends are moving in a positive direction, the results from the monitoring programmes on foodstuffs and the environment indicate that the situation is still not entirely satisfactory.

The target stating that "*Occurrence of pesticide residues in food and drinking water shall be reduced as much as possible, and never exceed approved maximum limits*", has not been met.

Neither has the target "*Pesticides in ground water should never occur, and shall not exceed drinking water approved maximum limits*", been achieved.

The result could be interpreted as having almost reached the target "*Occurrence of pesticides in streams and in surface water shall be reduced as far as possible, and shall not exceed levels that may be harmful to the environment*". However, monitoring over several years is called for in order to confirm this.

Several of the actions contained in the Action Plan are designed for the long term, and the impact will only become apparent after several years have passed. These are actions which are to a great extent conditional on their being sustained in order to maintain the effect.

The evaluation group emphasises the need for targeted efforts to further reduce the risk of damage to health and the environment through the use of pesticides. The surveys that have been carried out have also indicated that there is room for improvement within several areas.

The group would advise that the targets contained in the *Action Plan for Pesticide Risk Reduction (1998-2002)* be incorporated in a new *Action Plan for Pesticide Risk Reduction (2004-2008)*.

The actions contained in the new Action Plan, which are aimed at further pesticide risk reduction, should build on the equivalent main elements contained in the previous plan:

- Registered pesticides with the least harmful health and environmental profiles, and with proper labelling to provide sufficient information.
- Sound knowledge for users on biology, pesticides, spraying techniques, integrated production and organic farming.
- Optimal framework conditions for pesticide risk reduction, alternative plant protection methods, approved spraying equipment etc.
- Monitoring of pesticide residues in foodstuffs and the environment.
- Long-term knowledge-building

Several of the advised actions involve carrying actions contained in previous action plans further.
